

Application No. 10/715,390
Art Unit: 2838



Amendment under 37 C.F.R. §1.111
Attorney Docket No.: 032116

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended) A power supply control method adapted to a current-to-voltage conversion circuit which has a transformer for converting and outputting an input power, comprising:

stopping a power supply to the transformer when an output side of the current-to-voltage conversion circuit is in a no-load state or a ~~light-load~~ standby state; and

starting a power supply to the transformer when ~~an external~~ a voltage from external of the current-to-voltage conversion circuit is applied to the output side of the current-to-voltage conversion circuit.

2. (Currently Amended) The power supply control method as claimed in claim 1, wherein the ~~external~~ voltage from external of the current-to-voltage conversion circuit is applied to the output side of the current-to-voltage conversion circuit in a deactivated state, by controlling ON and OFF states of a switching circuit within an electronic apparatus to which the current-to-voltage conversion circuit is coupled.

3. (Currently Amended) A current-to-voltage conversion circuit having an active state and a deactivated state, comprising:

an input section to input an input power;

a transformer to convert the input power into an output power;
an output section to output the output power;
a first circuit to stop a power supply to the transformer and put the current-to-voltage conversion circuit into a deactivated state when the output section is in a no-load state or a ~~light-~~ load standby state; and
a second circuit to start a power supply to the transformer and put the current-to-voltage conversion circuit into an active state when ~~an external~~ a voltage from external of the current-to-voltage conversion circuit is applied to the output section.

4. (Original) The current-to-voltage conversion circuit as claimed in claim 3, wherein said first circuit includes a first comparator to compare an output current on a secondary side of the transformer and a threshold current.

5. (Original) The current-to-voltage conversion circuit as claimed in claim 4, further comprising:

a drive control circuit to drive the transformer; and
a first coupler circuit including a photo-coupler to couple an output of the first comparator and an input of the drive control circuit.

6. (Original) The current-to-voltage conversion circuit as claimed in claim 3, wherein said second circuit includes a second comparator to compare an output voltage on a secondary side of the transformer and a threshold voltage.

7. (Original) The current-to-voltage conversion circuit as claimed in claim 4, wherein said second circuit includes a second comparator to compare an output voltage on a secondary side of the transformer and a threshold voltage.

8. (Original) The current-to-voltage conversion circuit as claimed in claim 5, wherein said second circuit includes a second comparator to compare an output voltage on a secondary side of the transformer and a threshold voltage.

9. (Original) The current-to-voltage conversion circuit as claimed in claim 6, further comprising:

a drive control circuit to drive the transformer; and

a second coupler circuit including a photo-coupler to couple an output of the second comparator and an input of the drive control circuit.

10. (Original) The current-to-voltage conversion circuit as claimed in claim 7, further comprising:

a drive control circuit to drive the transformer; and

a second coupler circuit including a photo-coupler to couple an output of the second comparator and an input of the drive control circuit.

11. (Original) The current-to-voltage conversion circuit as claimed in claim 8, further comprising:

a second coupler circuit including a photo-coupler to couple an output of the second comparator and the input of the drive control circuit.

12. (Currently Amended) An electronic apparatus connectable to a current-to-voltage conversion circuit having an output side,

said current-to-voltage conversion circuit assuming a deactivated state when the output side is in a no-load state or a ~~light-load~~ standby state and assuming an active state when an ~~an~~ external a voltage from external of the current-to-voltage conversion circuit is applied to the output side,

said electronic apparatus comprising:

a switching circuit to apply the ~~external~~ voltage from external of the current-to-voltage conversion circuit to the output side of the current-to-voltage conversion circuit in the deactivated state.

13. (Currently Amended) An electronic apparatus comprising:

a current-to-voltage conversion circuit comprising an input section to receive an input power, a transformer to convert the input power into an output power, an output section to output the output power, a first circuit to stop a power supply to the transformer and put the current-to-voltage conversion circuit into a deactivated state when the output section is in a no-load state or a ~~light-load~~ standby state, and a second circuit to start a power supply to the transformer and put the current-to-voltage conversion circuit into an active state when ~~an external~~ a voltage from external of the current-to-voltage conversion circuit is applied to the output section; and

a control section to apply the ~~external~~ voltage from external of the current-to-voltage conversion circuit to the output section of the current-to-voltage conversion circuit in the deactivated state.

14. (Currently Amended) A power supply control method adapted to a current-to-voltage conversion circuit which has a transformer for converting and outputting an input power, comprising:

detecting a no-load state or a ~~light-load~~ standby state of an output side of the current-to-voltage conversion circuit; and

stopping a power supply to the transformer when the output side of the current-to-voltage conversion circuit is in the no-load state or the ~~light-load~~ standby state,

wherein the no-load state or ~~light-load~~ standby state is detected by detecting a state of the output side of the current-to-voltage conversion circuit.

15. (Currently Amended) A current-to-voltage conversion circuit having an active state and a deactivated state, comprising:

an input section to input an input power;

a transformer to convert the input power into an output power;

an output section to output the output power;

a detecting section to detect a no-load state or a ~~light-load~~ standby state of the output section; and

a circuit to stop a power supply to the transformer and put the current-to-voltage conversion circuit into a deactivated state when the output section is in the no-load state or the ~~light-load~~ standby state,

wherein the no-load state or the ~~light-load~~ standby state is detected by detecting a state of the output side of the current-to-voltage conversion circuit.